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DEVELOPMENT OF TOBACCO ECONOMY IN THE REPUBLIC OF MACEDONIA

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Abstract

Tobacco production is an important part of the Macedonian tradition, the Macedonian agriculture and economy in general. The aim of this work was to provide a clear picture of tobacco production and processing in Macedonia for a past period of twenty five years; for that purpose there were mainly used published statistical data by the State Statistical Office of the Republic of Macedonia, Analysis of the Ministry of Agriculture, Forestry and Water Economy. During data processing, many methods common for such research were used, mainly the comparative-analytical method. The production of tobacco takes place on an area of above 16.000 hectares, where farmers mostly use relatively poor, low productivity class soil. Today, the whole process of tobacco production includes more than 30.000 households and large number of family members. Tobacco industry in Macedonia has great importance for the overall economy of the state. The tobacco industry is also important as primary production, although less than 50% of the available capacities are not utilized. The production of cigarettes since independence of the country has a major reduction because of declining demand, which previously consisted of consumers from the ex-Yugoslavia. Today, part of the tobacco industry is transformed into private enterprises. The industry employs about 3.500 workers per year, has a relatively high share in the creation of domestic GDP and exports tobacco and cigarettes whose value exceeds the value of imported tobacco and cigarettes for domestic factories and direct customers with over 130 million US dollars annually. Tobacco is the most widely cultivated cash crop and, it seems that in Macedonia, tobacco will remain to be an interesting and profitable crop for many generations further.

Keywords: tobacco production, industry, cigarettes.

Introduction

Tobacco production and tobacco industry are especially important for the Macedonian economy. Both businesses have a long tradition, thanks to the favorable natural conditions for growing tobacco, the most important and the most widespread industrial culture. In addition to the economic significance, tobacco and its finalization have social significance, due to the relatively labor-intensive character of the technology of production. Annually about 30,000 families or approximately 100,000 people are involved in tobacco production. Tobacco is important for the Macedonian agriculture, because it uses relatively poorer soils, for which no one-year culture could contribute so much. For example, the realized yield of 1501 kg/ha with the achieved price in redemption of 162.0 mkd/kg gives an income of 243000 mkd/ha. Although today the tobacco industry of Macedonia is not what it represented prior to the independence of the state, it is important because with the processing of tobacco raw material and the modest amount of high-end production (cigarettes). It enables the engagement of over 5,000 workers and the export of tobacco and refined products to the world market in the amount of 150 million US dollars (2011). The independence of Macedonia and the complete or partial abandonment of economic relations with the other republics of the former Yugoslavia imposed the need for serious changes in the Macedonian economy. Although relatively small shocks in the tobacco industry have occurred, we consider it important to see what changes have happened since independence, both in the primary

production and in the industry, that is, the overall tobacco economy: what is the level of development achieved in the period from 1991 to 2015.

Material and methods

The main data are official statistical publications, published in the annual statistics and annual bulletins of the Republic of Macedonia for the analyzed years. The research period began in 1991, in which the Republic of Macedonia officially declared its independence from the former federation. The survey follows the data of changes and development with their analysis every five years, that is, comparisons refer to data for: 1991, 1996, 2001, and 2015. Comparative and analytical methods are complemented by computing relative relationships by using base and chain indexes. The survey refers to primary production, industry, exports, labor productivity.

Results and discussion

Primary production

The data for the movement of the primary production through the used area, the achieved yields per unit area (ha), as well as the total production of the tobacco, show a relative stagnation in the past period (1991- 2015). Namely, when observing the movement of the surfaces, it is noticeable that after 1991 they are moving up to 20 000 hectares (2001) and then decreasing, so in the last year of the survey there is the lowest volume of engaged surfaces (Table). A similar conclusion is derived from the tobacco yield indicator, however, in 2015, it is the highest, which can be assumed to have progress in the production technology itself. The total production of tobacco ranges from 15.4 thousand tons to 26.5 thousand tons of tobacco. In the last year, the production realized was less than in 1991, by about 4%, and the chain indices show an increase, and a decrease in the volume of manufactured tobacco.

Table 1. Indicators of primary tobacco production

Year	Area/ha	Yieldkg/ha	Total Production/t	Chain index
1991	18,32	1375	25,20	100
1996	17,51	1313	15,41	61,1
2001	20,07	1157	23,22	150,7
2006	17,51	1436	25,04	107,8
2011	19,68	1350	26,54	106,0
2015	16,13	1501	24,24	91,3

The natural, traditional and other important conditions for tobacco production in Macedonia are not sufficiently used. Some projections of the future development of tobacco production predict a realistic possible tobacco production at an annual level of over 36 000 tonnes, if the surfaces increase to 25 000 hectares, and the yield per unit area increases by 56 kg (Anakiev & Kabranova, 2010). It is known that for the engagement of producers in increasing production, the purchase price is especially important. Although tobacco - production, redemption and industry are subject to a special rules (Law on Tobacco and Tobacco Products - Official Gazette 24/2006, 88/2008, 31/2010, 36/2011 and 53/2011), purchase prices for domestic production depend not only on the movement of quantities of tobacco produced, but also on the supply and price of the World market, whose policy is carried out by the purchasers on behalf of the world's tobacco processing companies. The domestic tobacco industry can finalize only 5-10% of domestic tobacco production. The analysis of the movement of the purchase prices in the investigated period shows that they are moving mainly in a relatively high increase (Table 2), in line with the stagnation of the supply of primary production. According to the base index, the purchase price in 2015 is higher than in 1991, by 67%. Positive trends in tobacco production are in increased productivity, which is reflected in the volume of production of tobacco per producer (Table 3). Increased productivity is the result of an increased degree of mechanization of tobacco production, especially in planting and lowering tobacco (funds from the IPARD program).

Table 2. Purchase prices for tobacco

Year	Purchase price mkd/kg	Chain index
1991	96,8	100
1996	125,4	129,5
2001	116,7	93,1
2006	181,1	155,2
2011	150,0	82,8
2015	162,0	108,0

Table 3. Tobacco production by producer

Year	Production 000, tons	Number of producers	Production per producer/kg	Chain index
1991	25,20	38809	649	100
1996	15,41	27110	568	87,5
2001	23,22	35442	655	115,3
2006	25,04	29230	857	130,8
2011	26,54	33234	759	88,6
2015	24,24	28545	843	111,1

It is well-known that in Macedonia today, exclusively oriental type tobacco is grown, where a large part of the workforce is engaged in pre-harvest and post-production processes, which requires the engagement of a larger number of members in the family. From the data on the total quantity of tobacco (Table 3), it's clear that in the analyzed period production of tobacco in Macedonia has fluctuated over the years.

Tobacco industry

Today, compared to 25 years ago, the tobacco industry has a relatively small and limited volume, reduced to 5-6 000 tonnes per year. From the built capacities in the last century (for about 20 000 tons of cigarettes), only 20% are used in comparison with the time before, when production was placed in the territory of the former Yugoslavia. After independence, the production of cigarettes in Macedonia was limited only to the domestic market (Table 4). The production of cigarettes in Macedonia, although in recent years declines, it still has special significance for the tobacco industry (Miceski & Smokvoski, 2005).

Table 4. Fermented tobacco and production of cigarettes

Year	Fermented tobacco / 000 tons	Cigarettes, 000 tons	Chain index
1991	16,6	17,3	100
1996	14,0	7,9	45,7
2001	19,0	7,8	98,7
2006	20,6	5,1	65,4
2011	25,1	5,8	113,7
2015	23,9	6,7	115,5

Fermented tobacco is mainly exported, because a relatively small volume for the production of cigarettes is used (the types of domestic cigarettes use types for which Macedonia has no conditions for cost-effective production). The data for the production of fermented tobacco, which is a semi-finished product for the tobacco industry, show a steady increase, from 1991 to 2015, when production increased by 44%. Unfortunately, in the production of cigarettes, the situation is reversed, and the volume of manufactured cigarettes from 2015 compared to 1991 is 37%. There are reasons why measures are not taken to stimulate the production of cigarettes by state institutions, but once the state that is not released from the largest capacity is not guilty (not fully privatized), and second, the well-known relationship on the tobacco market in the world. Here, of

course, we take into account the recommendations and obligations of the WHO to reduce tobacco production, as well as the EU regulations on the volume of production in one country.

Export of tobacco and cigarettes

For the small and underdeveloped economy of Macedonia, as important as the development of the tobacco industry, the growth of the tobacco and cigarette exports on the world market is so important. Of course, export depends on the volume of production, both the primary and the production of fermented tobacco and cigarettes (Table 5).

Table 5. Export of tobacco and cigarettes

Year	Tobacco	Cigarettes	Total	Chain index
1991	60,8	9,8	70,6	100
1996	58,7	52,5	111,2	157,5
2001	43,4	27,7	71,1	63,6
2006	92,3	19,4	111,7	157,1
2011	118,2	35,3	153,5	137,4
2015	104,6	11,1	115,7	75,4

The data show that the value of manufactured products, especially fermented tobacco, has a positive trend as shown in Table 5, with export of fermented tobacco in 2011 and 2015 exceeding US \$ 100 million, and a more serious increase after 2001. As for the export value of cigarettes, the increase is not such, and it is relatively modest, so in 2015 the increased increase in 1991 was 1.3 million US dollars.

Conclusions

From the research on the development of the Macedonian tobacco business, the following can be noted: Capacity in the area for tobacco production has not increased. There is a relatively small increase in yield, while the total production of tobacco is appropriate with the movement of the tobacco area. It is certain that the opportunities of Macedonian farmers - tobacco growers are not realized. Despite the relative increase in purchase prices, the limitations of purchasing companies in terms of volume and quality of tobacco raw material do not allow for a more serious increase in primary production. According to how much it is produced per tobacco-producer, the production has a trend of growth. Fermented tobacco has increased production, which is important for exports, while cigarette production is stagnating. As a result of the relatively limited growth and development of tobacco production, the export value of the tobacco industry increased, which shows greater engagement of all the most important factors in the country for the promotion of the tobacco industry, because we expect the EU norms that need to be re-examined with the approach of Macedonia, especially the volume of primary production, which will reflect the entire tobacco industry.

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